

physicians and number of active hospital beds in the state will be made to each state health department.

2. The state health department will prepare a plan for the distribution of plasma within the state. Upon approval of the plan by the American Red Cross the initial allotment will be made available.

3. Subsequent allocations of plasma will be made available by the American Red Cross only upon request from the state health department.

4. The plasma is to be supplied and distributed free of charge. No charge will be made to any patient for plasma received.

5. The state health department will report at monthly intervals the amount of plasma received and distributed within the state.

The following plan for distribution of plasma in California, adopted by the State Department of Public Health, has been approved by the American Red Cross, the California Medical Association, and the Association of California Hospitals:

1. Distribution to areas where there is a full time local health service will be made through the local health departments. Initial allocations will be made to each local health department and distributed by one of the following procedures.

a. The initial allotments will be sent directly to the local health department for distribution by them.

b. The local health officer will supply the Division of Laboratories of the State Health Department with a list of hospitals in the local health jurisdiction indicating the amount allocated to each. The State Health Department will then ship the initial allotments to the hospitals indicated.

2. Distribution in areas where there is no full time health service will be through the county health officer whenever such arrangements can be made. If the health officer does not elect to act as the distributing agency for his county a medical agency in the county will be selected or the State Health Department will distribute plasma directly to the hospitals and physicians on request. The initial allocation will be issued only to counties where the county health officer or an approved agency acts as the distributing agent.

3. In order to avoid the piling up of plasma in offices or institutions where plasma may not be needed it is recommended that the local health departments make initial allocations to hospitals only, reserving a supply in the health department for any requests that may be made. The plan contemplates that doctors on hospital staffs could draw from the hospital supply for any plasma needed for outside cases. If the doctor is not affiliated with any hospital he should make application for plasma directly to the local health department or designated agency. If no agency has been approved for a county, applications for plasma should be made directly to the Division of Laboratories, California State Department of Public Health, Berkeley, California.

4. The supply of plasma in local health departments or approved agencies may be replenished from time to time upon request to the Division of Laboratories. Physicians and hospitals should direct their requests for plasma to their local health departments or to the local distributing agency.

5. The local health department or agency will report to the Division of Laboratories at monthly intervals the amount of plasma received and distributed. The State Health Department will furnish reporting forms and record cards in order to standardize the reports and records and to reduce the amount of clerical work to a minimum.

The plasma is prepared in dried form and packaged in 250 cc. and 500 cc. sizes. 500 cc. of plasma is re-

garded as one unit. Each package contains, in addition to the bottle of plasma, a bottle of sterile diluent sufficient to restore the plasma to its original volume and complete equipment for the rehydration and administration of the plasma.

It is the intent of this plan to make the plasma readily available, without cost, wherever and whenever it is needed in the state.

Plasma is now being distributed as rapidly as it becomes available from the American Red Cross.* The initial allocations are being delivered county by county. Each initial allocation will be accompanied by announcements through the local newspapers as the plasma becomes available in each area. It is hoped that complete distribution of the initial allocations can be made within two months.

While it is estimated that the available plasma will meet the needs of the civilian population for approximately two years, it should be borne in mind that this is only a small part of need for blood for transfusion purposes. Local blood banks must be relied upon for whole blood for transfusions.

663 Phelan Building, 760 Market Street.

BLAST INJURY OF THE SPINE

LEWIS COZEN, M. D.

Los Angeles

CONCUSSION of the back resulting from an exploding shell or bomb is a rare but interesting injury. Some data on fifteen soldiers with this injury are listed. It would have been interesting to follow these patients for a period of months or years, but because of the necessities of war I have seen them only for three to eight days. X-rays revealed no fractures in any of these patients.

The history of injury was practically identical in each case. The nearby explosive lifted the soldier out of his original position on the ground and he was deposited several feet away. They could not tell exactly how they landed but none thought that they landed with great force. It was their impression that the blast of air injured their backs rather than the resulting fall. Physical examination revealed little. There was tenderness of a diffuse nature usually in the lumbar area, usually bilateral. Motion of the involved area of spine was somewhat limited in all directions by pain. In only one case was there associated hematuria.

The most interesting feature of this group is their prognosis. It will be noted from Table 1 that lack of improvement was correlated with a history of previous chronic backache. All patients had simple symptomatic treatment consisting of analgesics, bed rest and baking and light massage. In only one case where a previous history of chronic back pain was present did any diminution of pain occur. On the other hand, improvement took place in every patient with no previous history of back pain.

SUMMARY

A series of fifteen patients who were injured by the concussion of a nearby explosive is reported. A definite correlation existed between the history of previous back pain and lack of improvement of symptoms.

* A mimeographed circular (Number 80428) has been issued by the Medical Director, American National Red Cross, Washington, D. C., under date of Feb. 11, 1946, with caption, "Normal Human Dried Blood Plasma, Army-Navy Surplus." It gives information concerning clinical use, and will be supplied on request by the Division of Laboratories, California State Department of Health, Berkeley 4, California.

TABLE 1.—Summary Concerning Fifteen Patients. Showing Correlation Between History of Previous Back Pain and Lack of Improvement of Symptoms

Reference Number	Names	Age	Distance from Explosion	Previous Chronic Backache	Response to Rest and Physiotherapy
1.	R. L.	32	10 yds.	None	Improving after 3 days
2.	S. K.	32	5 ft.	Yes, for past 8 years	No improvement after 5 days
3.	M. V.	27	10 ft.	Yes	Very slight improvement after 1 week
4.	B. A.	28	3 ft.	None	Improving after 4 days
5.	J. B.	26	5 ft.	None	Improving after 6 days
6.	P. P.	35	10 yds.	Yes	No improvement after 5 days
7.	J. C.	40	6 ft.	None	Some improvement after 6 days
8.	C. P.	20	20 yds.	Yes	No relief after 5 days
9.	L. W.	23	10 yds.	Yes	No relief after 3 days
10.	S. C.	22	5 yds.	None	Improving after 4 days
11.	D. C.	30	5 yds.	Yes, (minor)	No relief after 8 days
12.	I. J.	27	10 yds.	None	Improving after 4 days
13.	F. H.	32	5 yds.	Yes	No relief after 3 days
14.	H. D.	20	8 ft.	Yes	No relief after 5 days
15.	R. D.	26	3 ft.	Yes	No relief after 5 days

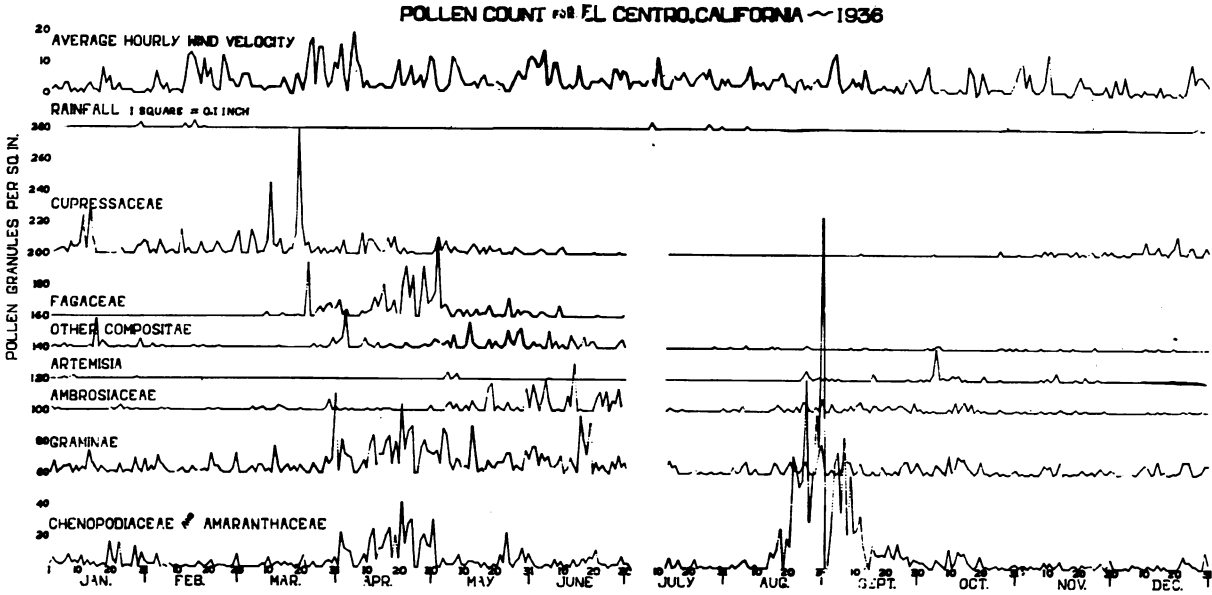
POLLINOSIS IN IMPERIAL COUNTY, CALIFORNIA, AND YUMA, ARIZONA

The tabular information and the graph appearing below are pertinent and supplementary to the article "Pollinosis in Imperial County, California, and Yuma, Arizona," by George F. Harsh, M.D., of San Diego, which appeared on page 245 of the April issue. They were inadvertently omitted from the issue in which the article was printed.

Pertinent Data on Plants of Importance in Pollinosis in Imperial County, California, and Yuma, Arizona

	Pollinating dates (months of year)	Pollen production	Size of pollen (microns)	Percentage of patients reacting		Plant abundance		Importance rating (Imperial County)
				1+	2-4+	Imperial county	Yuma area	
Galleta grass.....	2- 4	25	32	20	27	2	5	5
Bermuda grass.....	1-12	45	25	18	42	9	9	250
Knot grass*.....	6- 8	4	32	20	25	1-	2	
Honey mesquite*.....	4- 6	2	29	33	18	2	4	
Pecan tree*.....	5	+++	42	14	14	1-	5	
Careless weed.....	4- 9	150	29	21	24	4	5	70
Sowbane.....	2- 5	13	21	27	27	3	3	10
Shad scale.....	6- 9	60	25	24	30	4	3	40
Quail brush.....	8- 9	75	18	18	18	8	9	120
Cattle spinach.....	9	50	29	15	21	2	3	10
Desert holly.....	1- 4	35	25	30	10	1	0	5
Russian thistle.....	6- 9	30	25	18	30	5	3	30
Iodine bush.....	9-10	+++	18	36	24	2	1	10
Ink bush.....	8-10	20	25	27	21	6	2	20
Burrobush.....	2- 3	+++	21	19	11	2	1	10
Desert ragweed.....	3- 6	35	18	15	15	7	4	70

*Important only at Yuma.



Graph of daily pollen counts at El Centro, California.